

## FIRST RECORD OF DEXTELLIA TRIBERTI (LEPIDOPTERA, GRACILLARIIDAE, GRACILLARIINAE) IN CHINA, WITH DESCRIPTION OF ONE NEW SPECIES

BAI Hai-Yan, LI Hou-Hun\*

College of Life Sciences, Nankai University, Tianjin 300071, China

**Abstract** The genus *Dextellia* Triberti is recorded for the first time in China. *Dextellia palmata* Bai et Li is described as new and *Dextellia dorsilineella* (Amsel, 1935) is newly reported for this country. Images of the adults and illustrations of the genitalia are provided.

**Key words** Lepidoptera, Gracillariidae, Gracillariinae, *Dextellia*, new species, China.

Triberti (1986) established the genus *Dextellia* based on the type species *Leucospilapteryx dorsilineella* Amsel, 1935. Prior to this study, *Dextellia* consists of the type species only, which is distributed in the Palearctic Region. In this paper, we report the genus *Dextellia* Triberti and the species *D. dorsilineella* (Amsel) for the first time in China, and describe one new species from Xizang (Tibet) Autonomous Region, China.

Specimens examined in this study were collected by light traps. Terminology follows Triberti (1986). Genitalia dissection and the mounting methods follow Li and Zheng (1996). The type specimens are deposited in the Insect Collection, College of Life Sciences, Nankai University, Tianjin, China.

*Dextellia* Triberti, 1986 New record for China  
*Dextellia* Triberti, 1986: 252.

Type species: *Leucospilapteryx dorsilineella* Amsel, 1935.

**Diagnosis.** The genus *Dextellia* is characterized by the fore wing having  $R_5$  stalked with  $M_1$  and  $M_2$ , the mid and hind tibiae as well as the tarsi bearing projected scales. The valva divided into costal and saccular parts, the tegumen short and broad, the tuba analis covered with fine spines in the male genitalia. And the corpus bursae small, without signum in the female genitalia.

**Distribution.** Europe, Asia, Africa.

*Dextellia palmata* sp. nov. (Figs. 1, 3)

**Description.** Adult (Fig. 1). Fore wing length 4.0 mm. Head pale ochreous yellow, mixed with fuscous on neck. Labial palpus offwhite, with small fuscous spots ventrally, third segment black subapically. Antenna yellowish brown, scape dark fuscous on dorsal surface, flagellum ringed with dark fuscous except white apex. Thorax, tegula and fore wing dark fuscous. Fore wing interspersed with offwhite spots, mixed with ochreous

yellow on dorsum. Small black spots ranging above fold; a larger black spot set at basal 2/5 below fold; a small round black spot at apex; cilia concolorous with fore wing. Hind wing and cilia dark fuscous. Fore and mid legs dark fuscous, coxa of fore leg and femur of mid leg pale ochreous yellow ventrally, distal part of tarsi white. Hind leg with femur pale ochreous yellow except basal half fuscous on outer side; tibia pale ochreous yellow on inner side, dark fuscous on outer side; tarsi white to pale ochreous yellow, first segment with broad dark fuscous annulus at middle and distal 1/3 respectively, second segment at base and apex as well as third segment at base dark fuscous, last segment with a dark fuscous spot.

**Male genitalia** (Fig. 3). Tegumen broad, arched outwards laterally, concave slightly at middle on posterior margin. Tuba analis sclerotized, nearly peach-shaped, covered with fine spines. Valva about three times as long as tegumen. Costa bar-shaped, bluntly pointed at apex, with strong setae distally. Transtilla narrowly band-shaped. Sacculus longer than costa, wide at base, narrowed gradually to about 3/4; ventral margin with fine setae and dentations of different size; distal 1/4 palmate, with 3-4 long digitate processes, a stout toothlike process situated near base of first digitate process. Phallus tubular, about 0.8 times as long as valva. distal 1/5 membranous, with a sclerotized spinous process; cornutus absent.

**Female.** Unknown.

**Holotype**, China, M<sub>6</sub>og County (29°13'N, 95°18'E), Xizang (Tibet) Autonomous Region, 780 m, 12 Aug. 2003, leg. WANG Xin-Pu and XUE Huai-Jun, genitalia slide No. BHY07878. Paratype, 1, same data as holotype.

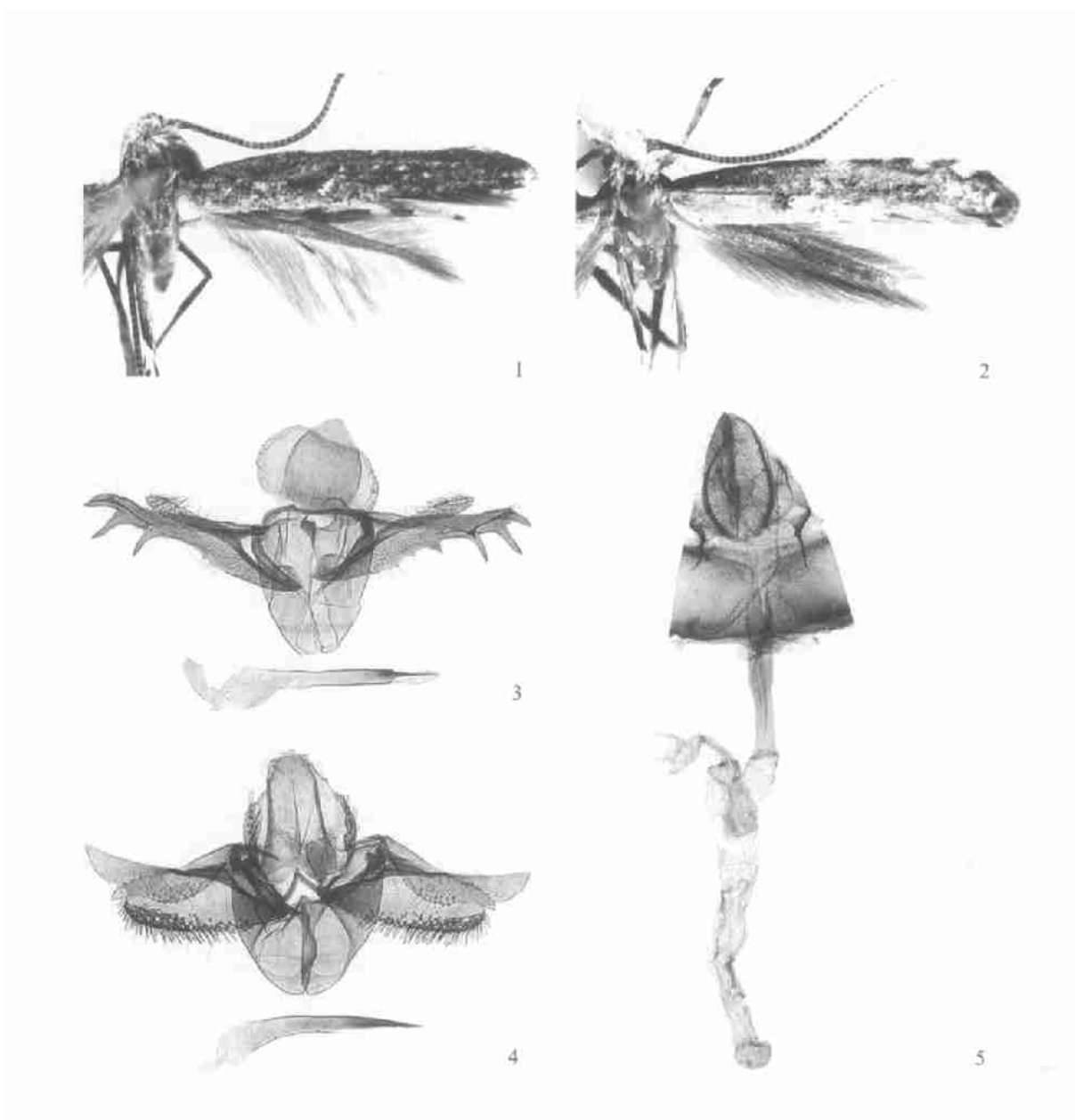
**Distribution.** China (Xizang).

**Diagnosis.** This new species can be distinguished easily from *Dextellia dorsilineella* by the fuscous ground color in the fore wing, the bar-shaped costa, the sacculus

This project was supported by the National Natural Science Foundation of China (J0630963).

\* Corresponding author, E-mail: lihounun@nankai.edu.cn

Received 5 Jan. 2009, accepted 30 Mar. 2009.



Figs. 1-5. *Dextellia* spp. 1, 3. *Dextellia palmata* sp. nov. 1. Adult (♂). 3. Male genitalia (slide No. BHY07878). Figs. 2, 4-5. *Dextellia dorsilineella* (Amsel). 2. Adult (♂). 4. Male genitalia. 5. Female genitalia.

longer than costa and having a palmate distal part provided with 3-4 digitate processes, and by the absence of cornutus in the male genitalia.

**Etymology.** The specific name is derived from the Latin *palmatus* (palmate), in reference to the shape of the distal part of sacculus.

***Dextellia dorsilineella* (Amsel, 1935)** New record to China (Figs. 2, 4-5)

*Leucospilapteryx dorsilineella* Amsel, 1935: 307.

*Dextellia dorsilineella*, Triberti, 1986: 254.

*Dextellia dorsiliniella*, Kuznetsov and Baryshnikova, 2001a: 41. An incorrect subsequent spelling of *Dextellia dorsilineella* (Amsel, 1935).

*Dextellia dorsilinella*, Kuznetsov and Baryshnikova, 2001b: 36. An incorrect subsequent spelling of *Dextellia dorsilineella* (Amsel, 1935).

Adult (Fig. 2). Fore wing length 3.5-4.5 mm.

**Material examined.** Inner Mongolia. 5, Wuyuan County (41°06' N, 108°16' E), 960 m, 17 Aug. 2002; 4, Dalad Qi (40°25' N, 110°02' E), 960 m, 13 Aug. 2002; 2, Dengkou County (40°20' N, 107°00' E), 1 000 m, 18 Aug. 2002, leg. LI Zhi-Qiang and ZHANG Dan-Dan.

**Distribution.** China (Inner Mongolia), Greece, Italy, Malta, Morocco, Palestine, Spain, Tunisia, Turkmenistan.

**Diagnosis.** This species is represented by the fore wing having 4-5 milk white spots on grayish fuscous costal margin, and having one white strip from basal 1/3 near dorsum obliquely upward crossing fold (Fig. 2). By the blade-shaped costa, the sacculus having strong setae in the median part, and the vesica having small horn-

shaped cornuti in the male genitalia (Fig. 4). And by the absence of signum in the female genitalia (Fig. 5).

Remarks. The specimens collected in China vary slightly. The scales covered on the tibia and tarsi of mid leg and on the hind tibia are somewhat smooth instead of projected as described by Triberti (1986).

## REFERENCES

- Amsel, H. G. 1935. Neue Palästinentische Lepidopteren. Mitteilungen aus Dem Zoologischen Museum in Berlin, 20: 271-319.
- Kuznetsov, V. I. and Baryshnikova, S. V. 2001a. New and little known Asian species of the leaf miners (Lepidoptera, Gracillariidae). Trudy Zoologicheskogo Instituta, Rossijskaya Akademiya Nauk, 291: 31-46.
- Kuznetsov, V. I. and Baryshnikova, S. V. 2001b. A review of Palaearctic genera of the gracillariid moths (Lepidoptera, Gracillariidae), with description of a new subfamily Ornixolinae Kuznetsov et Baryshnikova, subfam. n. Entomological Review, 81 (1): 26-46.
- Li, H-H and Zheng, Z-M 1996. Methods and techniques of specimens of microlepidoptera. Journal of Shanxi Normal University (Natural Science Edition), 24 (3): 63-70.
- Triberti, P. 1986. Note su *Leucospilapteryx dorsilineella* Amsel e *Acroerops exinipalpella* Gerasimov, con descrizione di due nuovi generi ed una nuova specie (Lepidoptera, Gracillariidae). Bollettino del Museo Civico di Storia Naturale di Verona, 13: 249-264.

## 异瓣细蛾属在中国首次报道及一新种记述（鳞翅目，细蛾科，细蛾亚科）

白海艳 李后魂\*

南开大学生命科学学院 天津 300071

**摘要** 异瓣细蛾属 *Dextellia* Triberti 建立于 1986 年，已知 1 种，即模式种。本文首次报道该属在中国的分布，并记述 1 新种和 1 新纪录种。模式标本保存在南开大学生命科学学院昆虫标本室。

**褐翅异瓣细蛾，新种** *Dextellia palmata* sp. nov. (图 1, 3)

前翅黑褐色；雄性抱器背棒状，抱器腹长于抱器背，端部掌状，有 3~4 个指状突，阳茎无角状器等特征明显不同于模式种异瓣细蛾 *D. dorsilineella* (Amsel, 1935)，很容易

区别。

分布：中国（西藏）。

**异瓣细蛾** *Dextellia dorsilineella* (Amsel, 1935) 中国新纪录 (图 2, 4~5)

分布：中国（内蒙古），巴勒斯坦，土库曼斯坦，希腊，意大利，西班牙，马耳他，摩洛哥，突尼斯。文中提供了成虫、雄性和雌性外生殖器特征图。

**关键词** 鳞翅目，细蛾科，细蛾亚科，异瓣细蛾属，新种，中国。

**中图分类号** Q969.425.8

\* 通讯作者。